

Please amend the application as follows:

IN THE SPECIFICATION:

Please replace the paragraph at page 1, lines 9 - 11, with the following rewriten paragraph:

-- This application is a continuation of Application Serial No. 09/124,291, filed July 29, 1998, which is currently pending, which is a continuation-in-part of Application Serial No. 08/920,283, filed August 26, 1997, which is abandoned. --

Please replace the paragraph at page 19, line 26, through page 20, line 8, with the following rewritten paragraph:

-- The liner assembly 11 and assembly 4 including the brace members 9 and the deposition support members 8 may be manufactured from any suitable material, such as metal, plastic, electrically non-conductive materials, etc. Preferably, the liner assembly 11 and brace members 9 comprise any substance or material that has an extremely low dielectric constant or low thermal conductivity, or both. The liner assembly 11 and brace members 9 are preferably essentially non-conductive and may consist of a wide variety of solid types of non-conductive material such as porcelains, glass, mica, magnesia, alumina, aluminum silicate, various high polymers (e.g., epoxies, polyethylene, polystyrene, PVC, phenolics, etc.), cellulosic materials, cellular rubber, nylon, and silicon resins. These low dielectric constant materials may be used alone or in combination with other insulators. The deposition support members 8 are preferably manufactured form a semiconductive material or an electrically conductive material. Suitable semiconductive materials include germanium, silicon, silicon carbide, and selenium, etc., with resistivities in the range of 10⁻² to 10⁹ ohms/cm. Suitable electrically conductive materials include metals (e.g., aluminum, copper, platinum, etc.) and alloys, carbon and graphite, etc. --

 įΠ

100 m

n

1

U.S. Express Mail No.: ET160381255US Attorney Docket N. AM-2090P1.C1/2090.C2

Please replace the paragraph at page 25, line 19, through page 26, line 32, with the following rewritten paragraph:

-- A preferred inductively coupled plasma reactor for employing a plurality of the assemblies 4 of the present invention is that which inductively couples a plasma in a decoupled plasma source etch chamber sold under the trademark DPSTM owned by Applied Materials, Inc., 3050 Bowers Avenue, Santa Clara, California 95054-3299. The DPS™ brand etch chamber decouples or separates the ion flux to the semiconductor wafer 13 form the ion acceleration energy and may be any of the DPSTM brand etch chambers of the inductively coupled plasma reactors disclosed in U.S. Patent No. 5,753,044, entitled "RF PLASMA REACTOR WITH HYBRID CONDUCTOR AND MULTI-RADIUS DOME CEILING" and assigned to the present assignee and fully incorporated herein by reference thereto as if repeated verbatim immediately hereinafter. Referring now to Figs. 12 and 13 for two (2) embodiments of an inductively coupled plasma reactor, generally illustrated as 100, having a reactor chamber, generally illustrated as 102, wherein a high density plasma of neutral (n) particles, positive (+) particles, and negative (-) particles are found. The reactor chamber 102 has a grounded conductive cylindrical sidewall 108 and a dielectric ceiling or window 110. A plurality of the assemblies 4 of the present invention may be secured to an inside surface of the dielectric ceiling 110 as best shown in Fig. 14. The inductively coupled RF plasma reactor 100 further comprises a wafer pedestal 114 for supporting the (semiconductor) wafer 13 in the center of the chamber 102, a cylindrical inductor coil 120 surrounding an upper portion of the chamber 102 beginning near the plane of the top of the wafer 13 or wafer pedestal 114 and extending upwardly therefrom toward the top of the chamber 102, an etching gas source 124 and gas inlet 128 for furnishing an etching gas into the interior of the chamber 102, and a pump 132 for controlling the pressure in the chamber 102. The coil inductor 120 is energized by a plasma source power supply or RF generator 136 through a conventional active RF match network 140, the top winding of the coil inductor 120 being "hot" and the bottom winding being grounded. The wafer pedestal 114

ļ.

includes an interior conductive portion 144 connected to the bias RF power supply or generator 148 and an exterior grounded conductor 152 (insulated from the interior conductive portion 144). Thus, the plasma source power applied to the coil inductor 120 by the RF generator 136 and the DC bias RF power applied to the wafer pedestal 114 by generator 148 are separately controlled RF supplies. Separating the bias and source power supplies facilitates independent control of ion density and ion energy, in accordance with well-known techniques. To produce high density plasma 104 as an inductively coupled plasma, the coil inductor 120 is adjacent to the chamber 102 and is connected to the RF source power supply or the RF generator 136. The coil inductor 120 provides the RF power through the dielectric ceiling or window 110 which ignites and sustains the high ion density of the high density plasma 104. The geometry of the coil inductor 120 can in large part determine spatial distribution of the plasma ion density of the high density plasma 104 within the reactor chamber 102. The assemblies 4 allow stable power transmission to pass through the dielectric ceiling 110 and into the chamber 102 since the assemblies 4 would receive the deposit 7 of material and keep the inside surface of the dielectric ceiling 110 free of the electrically conductive deposit The assemblies 4 would also prevent the deposit 7 of materials from becoming generally continuous during processing (e.g., metal etching) of the semiconductor wafer 13 in the high density plasma 104. --